



# Professional LTE Networks architecture

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**User Requirements**

**Flexible & scalable architecture**

**Vision on Future PMR networks**

**Summary**





- Real-Time Video & Aerial video feeds
- Database query
- Geo-localized multimedia information
- Connect all-types of sensors



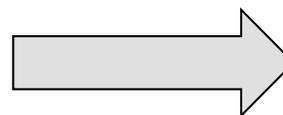
**Improved situational awareness for better decision & improved efficiency**

## Life Saving Apps

- See the situation you are heading into
- Bring dispatch into mobility
- Know who you are dealing with



## Life Saving Apps



**Improved situational awareness for better decision & improved efficiency**

## Cost Reduction

- Access to a large eco-system and integrate commercial-like technology
- Eliminate obsolete technology – costly to maintain



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## Life Saving Apps

- See what you are heading into
- Bring disaster relief to your car
- Know what you're dealing with



**4G / LTE is the right technology to deliver those new services, with additional requirements on:**

- ◆ Resilience
- ◆ Guarantee of Service
- ◆ Security
- ◆ Dedicated Applications
- ◆ Flexible and scalable architecture

Improved efficiency



**NEXIUM**  
Wireless

Access to a large eco-system and rate commercial-like technology

Replace obsolete technology – costly to maintain

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**Lte**  
By THALES

Regional to national dedicated Infrastructures

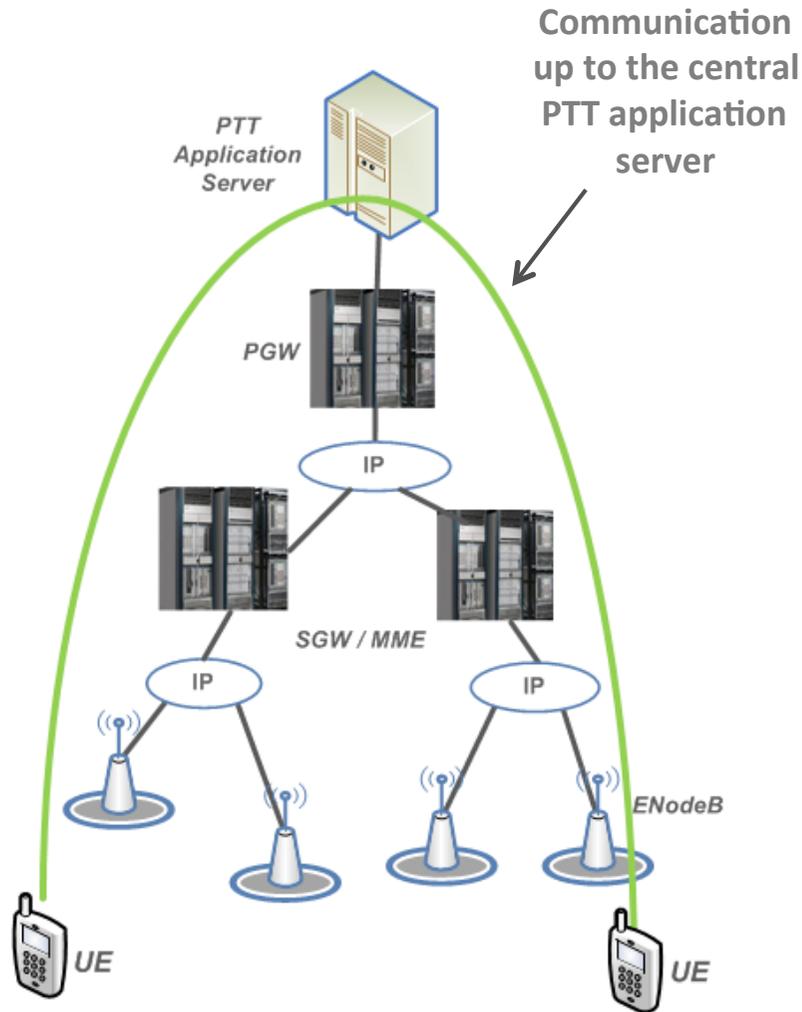
Secure-Mobile Virtual Network Operator (S-MVNO) solution

Small deployable & fixed Infrastructures

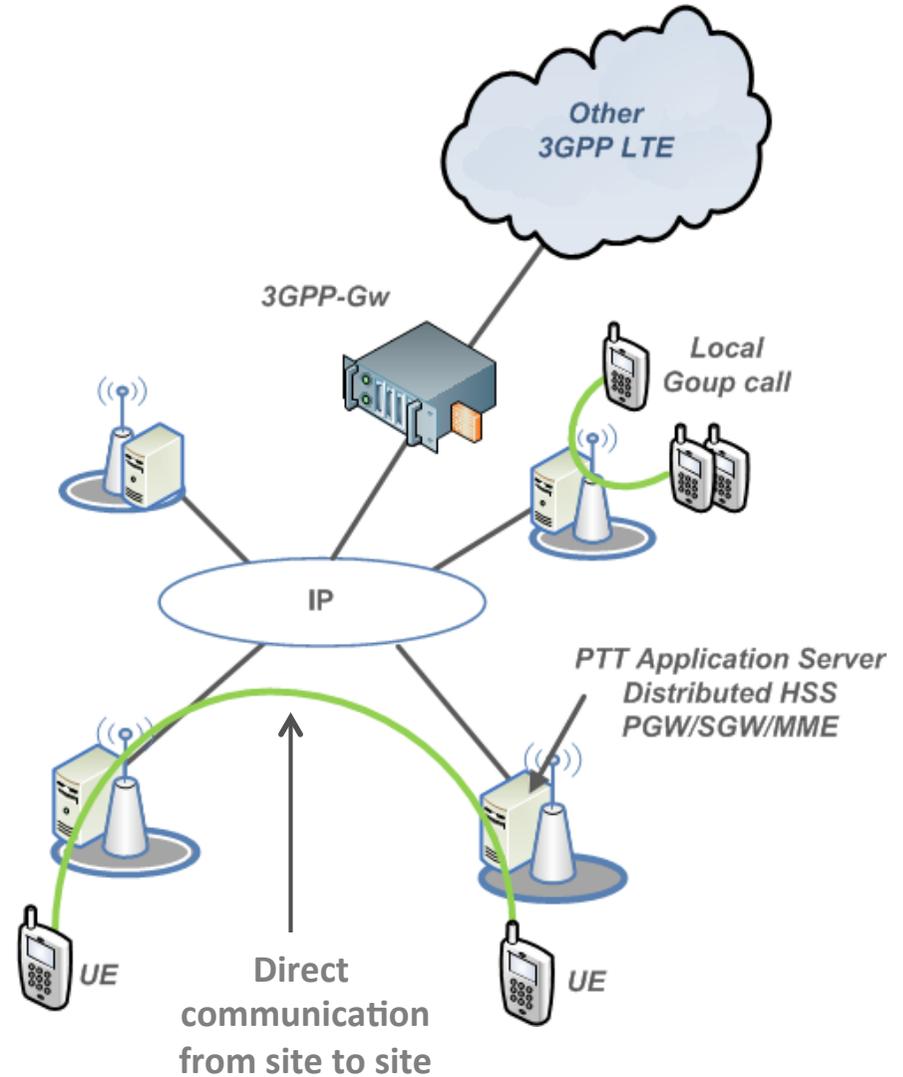
Cells / System on wheels (on foot, water, air)

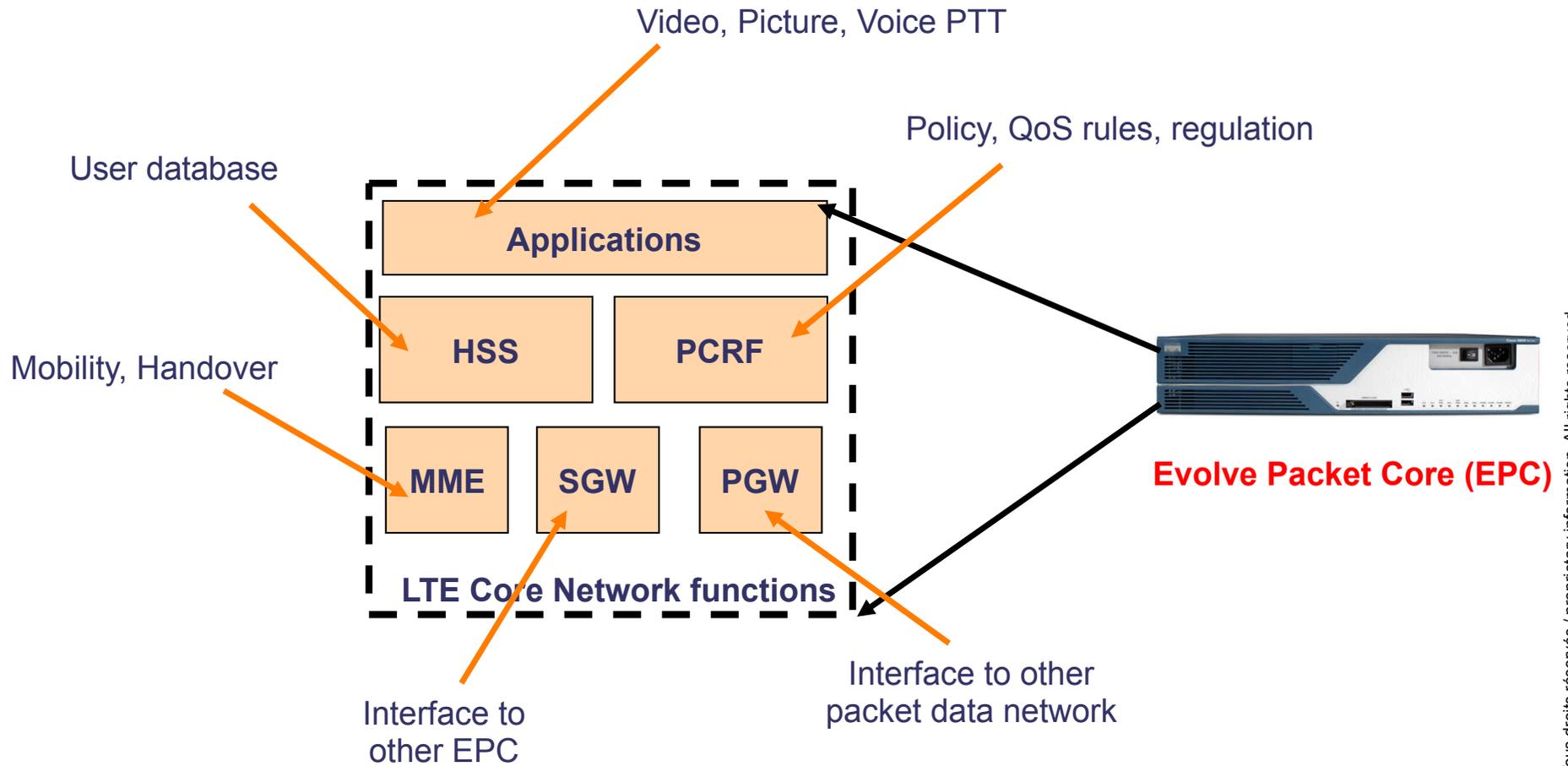
Applications & Security

## Centralized LTE architecture



## Edge-centric LTE architecture





**3GPP compliant Architecture**

## Edge-Centric LTE Solution

- ◆ **Key features decentralized to radio sites for Resiliency and Availability**
- ◆ **Cost-Effective – All-in-one Box**
- ◆ **Scalable architecture**
  - From single site to nationwide deployment (dedicated or MVNO approach)
- ◆ **Virtualized solution**
  - Adapt to capacity requirement

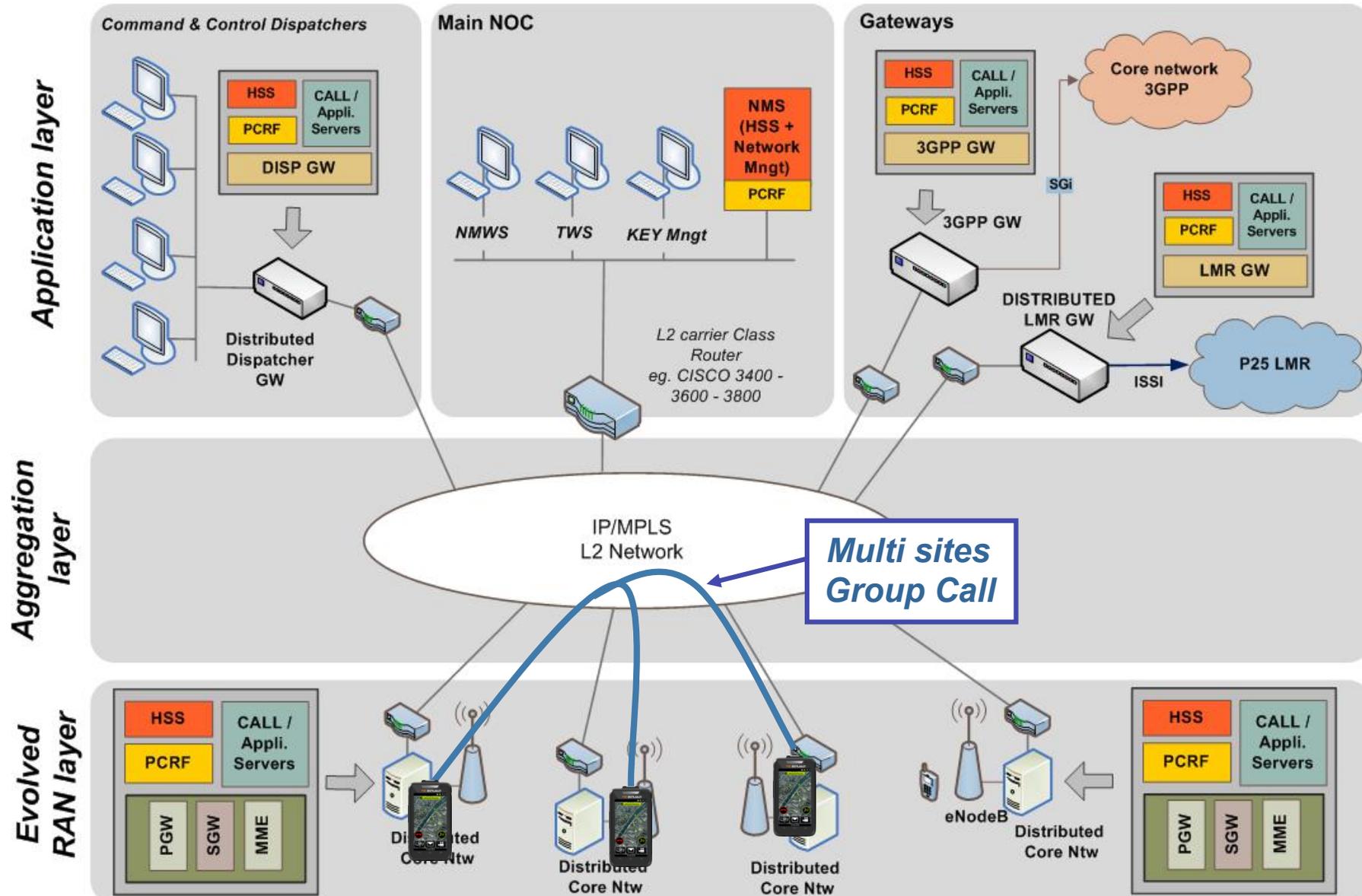


**First Edge-Centric LTE solution  
certified in the U.S.**

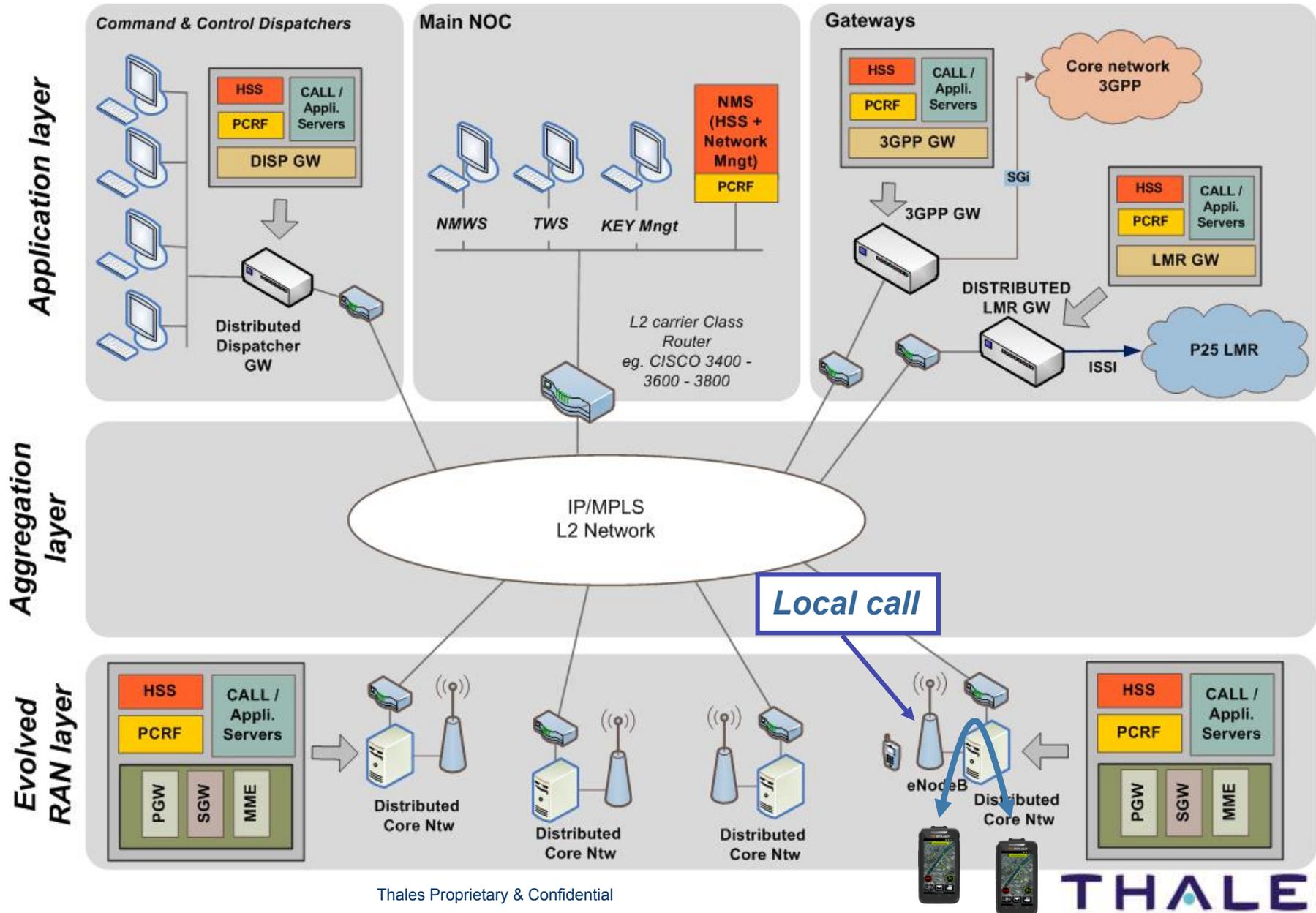


# Group call multi sites

## THALES LTE distributed architecture



## THALES LTE distributed architecture

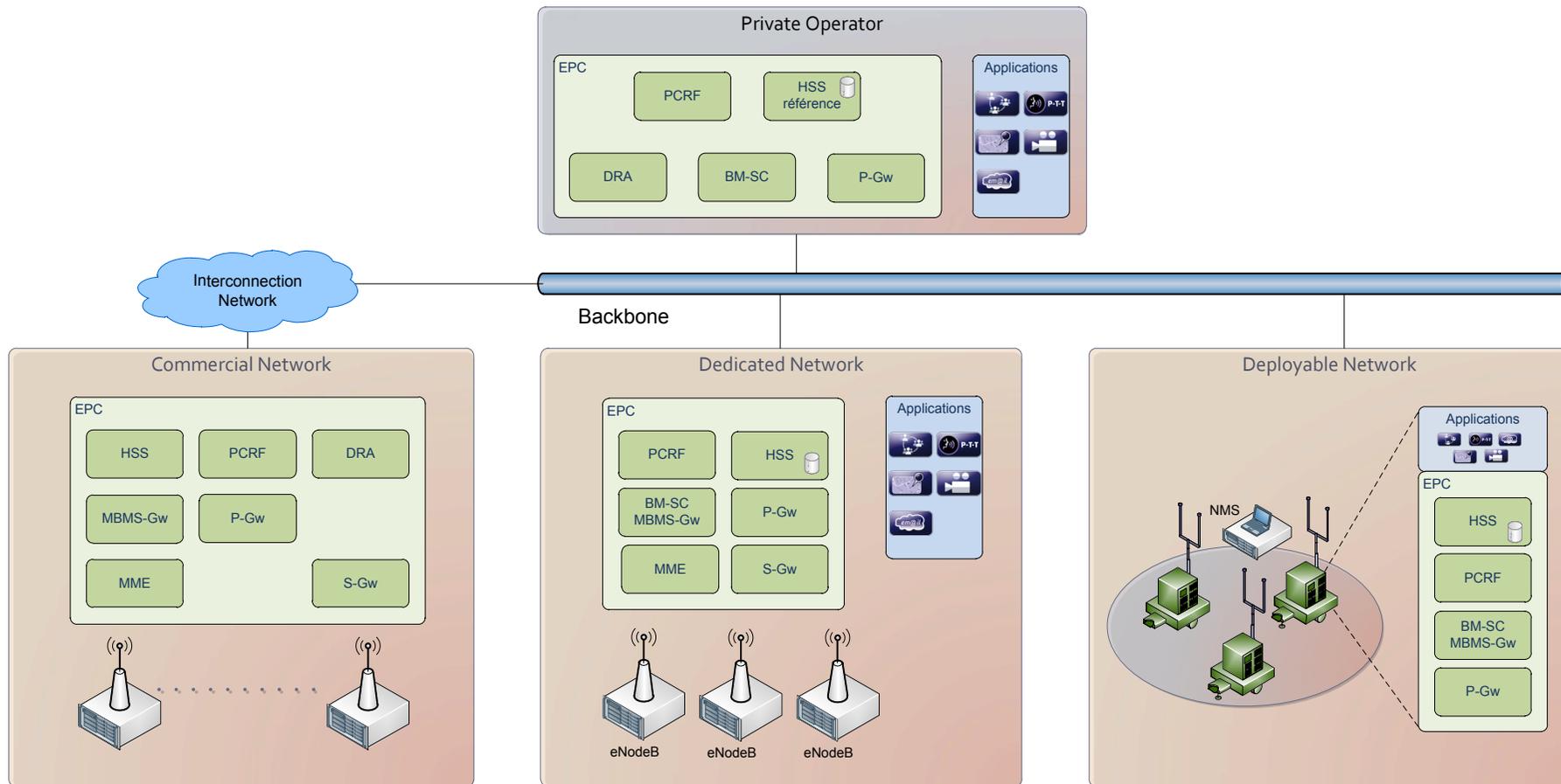


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## Hybrid network approach with dedicated, MVNO and deployable components

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**Summary**

**Dedicated security solution**



**SDK to integrate 3rd party applications**



**S-MVNO Solution**



**PMR Services over LTE**



**Edge-centric LTE core network solution**



**Deployable solutions**

**Ruggedised Push-to-Talk smartphone**



**NEXIUM Wireless : the first and unique LTE solution which is adapted to civil and military security forces' mission-critical applications**

